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OBSERVATIONS

ON

A Treatiſe lately publiſhed,

INTITLED,

An Eſſay on Viſual Glaſſes.

BRITISH MUSEUM

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An Eſſay on Viſual Glaſſes.

I SHOULD not have troubled myſelf or the Publick on this Subject, had the Author acquitted himſelf as a Gentleman or Philoſopher; but, as his Pamphlet is ſo productive of Quackery and Ignorance, my Friends thought it abſolutely neceſſary I ſhould make ſome few Remarks thereon, not only in Vindication of myſelf and others, but alſo to prevent the Publick being impoſed on.

I ſhall make no other Obſervation on his former Works, compiled only from

better Authors, than that they would paſs tolerably well, were the Errors corrected by ſome more judicious Perſon. But I cannot help taking Notice, how much he muſt be wanting in Senſe and Modeſty, as a Lecturer in Philoſophy, not to know, that He who at *Chicheſter* could paſs for a *Conjurer*, can be held but in little Eſteem in this Metropolis, where ſo many of far ſuperior Abilities have ſo often already exhibited their Performances.

The few Remarks to be made ſhall be very conciſe: But whether to laugh at his Ignorance, or be angry at his Impudence, is what I am at a Loſs about, therefore ſhall leave that to thoſe who read his Pamphlet.

I ſhall paſs over that Part of his Treatiſe relating to the Nature of Viſion, without any other Obſervation, than that ſo many technical and uſeleſs Words are introduced, as renders it entirely incomprehenſible to common Capacities, for whoſe Inſtruction Treatiſes of this Kind

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are only uſeful; the Learned have no Occaſion for them. As the Attempt of my Treatiſe was to render it eaſy to the moſt common Capacity, ſo I hope it has produced its deſired End. And having given my Opinion concerning what Kind of Glaſs is moſt proper for the Eaſe of the Eye, which by Experience has been much approved of, I ſhall now take ſome Notice of what Frames are moſt proper for the Purpoſe of Spectacles. But, before I proceed, muſt obſerve, that the Writer, in order to ſhew the World how great an Adept he is in the Viſual Science, (as he calls it,) has produced a Frame (which he terms Philoſophical) with a certain Curvity, and with very ſmall Glaſſes; but, unfortunately for himſelf, has miſtaken the Point, expoſed his own Ignorance, and ſhewn himſelf a mere Quack; for had he rightly and properly ſtudied the Viſual Science (he is ſo fond of) he would have known, that all Lenſes, even combined ones, much more ſingle ones, bear a proportional Degree of Aperture in proportion to their ſeveral Foci.

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From whence I muſt obſerve, that had he calculated what would have been the proper Aperture for a ſingle Lens of four Inches Focus, (the ſhorteſt almoſt ever uſed,) and ſo on to thoſe of ſixty Inches, (the longeſt generally ever uſed,) he would have found this latter to bear at leaſt a Diameter of three Inches, or more, without any the leaſt Prejudice to the Eye; and the former at leaſt one Inch for an Eye requiring ſo much Light, as one ſo flat muſt of Conſequence do.

Had he conſidered the Structure and Formation of that wonderful Machine, he would have found that Nature had formed a proper Aperture, and given it a Power of Dilation and Contraction to perform all that noble Purpoſe, without any ſuch Aſſiſtance as his *Viſual Science* can poſſibly provide for it.

It would have burthened him with very little Study to have convinced himſelf of the Utility of large Glaſſes; and how the Eye may move from Line to Line without

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that Obſtruction naturally ariſing from the Reflection of the Rims thoſe ſmall Glaſſes are ſet in, where the Head muſt be in continual Motion to every different Word it paſſes to.

As to the Curvity of the Frame, ſuppoſing it of any Advantage, he has never conſidered the proper Angle; for, as moſt People ſee at twelve or fourteen Inches, the Curve ſhould be of a due Proportion, and that fitted to the greateſt Exactneſs, to make it anſwer with his Syſtem. It will be neceſſary, likewiſe, that the Perſon uſing theſe ſhould be extremely careful not to move a Quarter of an Inch nearer or further from the Paper, or other Object; otherwiſe, the Obliquity of Rays paſſing through the Glaſs will be ſo very great, as to cauſe Confuſion, and entirely deſtroy diſtinct Viſion. The Frames I ſhould recommend, whether to fix on the Noſe, the Temples, or, what is more convenient, thoſe that preſs on neither, to be of as large a Diameter as they can be, ſo that the Pupil of the Eye be exactly in the Center

ter of the Glaſs. This, I am certain, by Experience, will be found much more advantageous than the ſmall ones.

Laſtly, with regard to the Glaſs, the *moſt material of all*, he happens to recommend a Compoſition contrary to the beſt Philoſophy, contrary to his own Explanation of Viſion, and, what is more unfortunate, a Kind of Glaſs not to be met with but with the greateſt Difficulty, and that indeed very bad, as this minute Philoſopher can produce a Specimen of. But, for the ſake of Oppoſition, and to perſevere ſtill obſtinately wrong, he ſells Spectacles made of the moſt inferior kind of Glaſs, *namely, the White Flint*; which is fuller of Veins and Specks than any other, except that which he recommends.

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